

Attention: Mr. Steve Barlow

Regarding: Department of Veterans Affairs

10701 East Boulevard Cleveland, Ohio 44105

Steam Condensate Heat Recovery System – Addendum 03

VA Project 541-12-105

Mr. Barlow.

Please incorporate the following items in an addendum for the above referenced project.

Addendum Items:

A. RFI Questions:

Question 1: Reference Drawing 2-H2, Boiler Controls Notes I. "Tie-into the existing Andover controls...." Can all desired points be picked up by accessing the compactlogix master controller with a software driver (i.e. BACnet)? Or shall the points be picked up by hardwiring to the master controller or each boiler? Please elaborate/advise.

• Answer 1: The alarm points can be picked up via modbus but all other points must be hard wired from the master controllers.

Question 2: Reference Drawing 2-H15, Heat exchanger piping new work diagram. New control valves. The existing valve actuators are pneumatic. Is the intent for the new valve actuators to be electronic? Please advise.

• Answer 2: Yes the new valve shall be electronic actuators. Provide the wiring, controllers, and programming changes required for fully functional DDC steam control valves.

Question 3: Reference Drawing 2-H15, Heat exchanger piping new work diagram. New control valves. What is the steam consumption/usage (lb./hr.) for each of the existing (east/west) heat exchangers? This will be used to size the new control valves. I believe that the east are 2,600 (lb./hr.) each and the west are 2,000 (lb./hr.) each. Please advise.

• Answer 3: The East Penthouse heat exchangers are: 2200 #/hr each. The West Penthouse heat exchangers are: 1700 #/hr each.

Question 4: Reference Drawing 2-H12, LCV 1C. We believe this valve will be controlled by the new compactlogix boiler control system and not the Andover. Please elaborate/advise.

• <u>Answer 4:</u> That is correct the new valve referenced shall be controlled by the boiler control system, not Andover.

Please contact us with any questions.

Sincerely, Fredrick, Fredrick & Heller Engineers, Inc.

David Demagall, PE